

- 1 INCREASE EMBEDMENT 300 mm FOR EACH 1.5 m INCREMENT IN POLE LENGTH OVER 6.0 m.
- 2 ITEMS ARE INSTALLED AS REQUIRED (SEE PLANS).
- 3 ITEMS ARE INSTALLED IF THE POLE IS USED AS A POWER SUPPLY (SEE GENERAL NOTES).
- 4 THREE OR MORE ENTERING CONDUITS WILL REQUIRE A PULL BOX OR OTHER APPROVED FITTING.
- 5 DOUBLE GALVANIZED 10 mm STEEL GUY WIRE - 7 STRAND HIGH STRENGTH GRADE.
- 6 SERVICE WIRE AND SPLIT-BOLT OR SLEEVE CONNECTION BY UTILITY COMPANY. WIRE SPACING AS REQUIRED BY THE UTILITY COMPANY.
- 7 10 mm AUTOMATIC JAW TYPE CABLE FITTING WITH SHORT BAIL. 6300 kg MINIMUM HOLDING STRENGTH.
- 8 19 mm NOMINAL COPPER GROUND ROD, 2.4 m MIN. LENGTH. IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN A VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 750 mm DEEP. CONNECTION TO GROUND ROD SHALL BE CADWELDED.
- 9 DOUBLE GALVANIZED 6 mm STEEL TETHER WIRE - 7 STRAND HIGH STRENGTH GRADE. INSTALL HORIZONTAL OR BELOW HORIZONTAL.
- 10 13 mm GALVANIZED OVAL EYE BOLT.
- 11 NON-CORROSIVE METAL CABLE HANGERS AT 300 mm CENTERS.
- 12 MULTI-CONDUCTOR CABLE (SEE PLANS).
- 13 METER SOCKET AND CABINET.
- 14 CONTROLLER CABINET. ALL CONDUITS SHALL ENTER THE BOTTOM OF THE CABINET. NO HOLES SHALL BE MADE IN THE TOP, BACK OR SIDES OF THE CABINET.
- 15 JUNCTION BOX (NEMA 4).
- 16 DISCONNECT HANGER (NOT REQUIRED IF TEMPORARY).
- 17 CIRCUIT BREAKER CABINET. SEE 2 & 3 AND DRAWING M902.10 FOR DETAILS.
- 18 16 mm GALVANIZED STRAIGHT THIMBLEYE BOLT WITH GALVANIZED NUT AND 63 mm GALVANIZED CURVE WASHER.
- 19 16 mm GALVANIZED ANGLE THIMBLEYE.
- 20 STETHER WIRE AND CLAMP WITH QUICK RELEASE PROVISIONS. SEE DETAIL FOR MOUNTING TO POLE AND SIGNAL, OPTIONAL ATTACHMENT PERMITTED WITH APPROVAL OF ENGINEER.
- 21 63 mm GALVANIZED POST PLATE FASTENED TO POLE WITH ONE 16 mm GALVANIZED MACHINE BOLT & TWO 10 mm x 100 mm GALVANIZED LAG SCREWS.
- 22 63 mm GALVANIZED CONNECTOR END FITTING.
- 23 ALL LOCATIONS REQUIRE GUY WIRE PROTECTOR. (2.1 m MIN.)
- 24 10 mm x 2.4 m GALVANIZED THIMBLEYE ANCHOR ROD. (760 mm MIN. LENGTH IN ROCK)
- 25 16 mm<sup>2</sup> BARE COPPER WIRE IN 13 mm CONDUIT.
- 26 6 mm AUTOMATIC JAW TYPE CABLE FITTING WITH SHORT BAIL. 5990 LBS. MINIMUM HOLDING STRENGTH.
- 27 LIGHTING CIRCUIT BREAKER CABINET (IF LUMINAIRES ARE SPECIFIED SEE DRAWING M902.15 FOR DETAILS).

**GENERAL NOTES:**

DESIGN OF STRUCTURAL SUPPORTS SHALL COMPLY WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS 2001 AND CURRENT INTERIMS.

**MAXIMUM SPAN LENGTH:**  
100' FOR ONE OR TWO SPANS OFF POST, WITH ONE 5-SECTION HEAD SIGNAL, TWO 3-SECTION HEAD SIGNALS AND TWO SIGNS PER SPAN.

ALL APPURTENANCES TO BE MOUNTED ON POLE SHALL BE FASTENED TO POLE AS RECOMMENDED BY THE MANUFACTURER.

SCHEDULE 40 POLYETHYLENE OR POLYVINYL CHLORIDE CONDUIT AND WEATHER HEAD SHALL BE USED ON UTILITY COMPANY POLES IN LIEU OF RIGID STEEL CONDUIT.

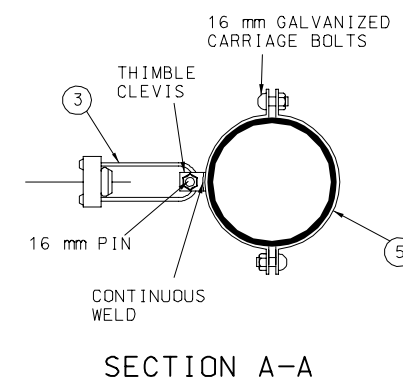
NO DIRECT PAYMENT WILL BE MADE FOR GUYS, CONDUIT AND JUNCTION BOXES ON POLES, HARDWARE, LIGHTING BRACKET ARMS OR ANY OTHER ITEMS FOR WHICH SEPARATE PAYMENT IS NOT PROVIDED.

ALL GUY WIRES SHALL BE GROUNDED.

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

# **TRAFFIC SIGNALS** **WOOD POLE** **SPAN WIRE DETAILS**

DATE: \_\_\_\_\_ EFFECTIVE: 04-01-2005 **M902.70N**



- GENERAL NOTES:

DESIGN OF STRUCTURAL SUPPORTS SHALL COMPLY WITH AASHTO  
STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY  
SIGNS, LUMINAIRES AND TRAFFIC SIGNALS 2001 AND CURRENT INTERIMS.

- GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

WHEN WELD IS DETAILED AND MANUFACTURED AS SHOWN IN DETAIL A, SPANS  
WITHOUT GUY WIRES SHALL BE:  
33 m FOR SINGLE SPAN, 4 SIGNAL HEADS  
21 m FOR TWO SPANS SUPPORTED FROM ONE POLE, 3 SIGNAL HEADS.

CONCRETE POLE EMBEDMENT SHALL BE CLASS B CONCRETE.

SEE SHEET 1 FOR DOWN GUY INFORMATION WHEN DOWN GUY IS SPECIFIED  
ON PLANS.

EXPANSIVE GROUT SHALL BE USED BETWEEN THE POLE BASE PLATE AND THE CONCRETE BASE WHEN INDIVIDUAL NUT COVERS ARE USED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
	<p style="text-align: center;"><b>TRAFFIC SIGNALS</b> <b>RIGID SPAN WIRE DETAILS</b></p>		
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## STEEL POST DETAILS